

### 3.0 ALTERNATIVES

The Alternatives analysis presented in this Chapter supplements the Alternatives analysis in the 1996 FEIS and differs from its predecessor in the following ways.

- This Alternatives analysis is based on updated 2020 forecasts for land use, population, employment and traffic demand prepared by the Northeastern Illinois Planning Commission (NIPC) and the Chicago Area Transportation Study (CATS). The Alternatives analysis in the 1996 FEIS was based on NIPC and CATS 2010 forecasts.
- This Alternatives analysis evaluates a more detailed No-Action scenario by using traffic projections based on land use forecasted to occur in the absence of the Transportation System Improvement. Therefore, forecasts for No-Action land use and traffic more accurately reflect conditions anticipated to occur should the Transportation System Improvement not be implemented. The NIPC and CATS land use and traffic forecasts used in the 1996 FEIS included the Transportation System Improvement.
- This Alternatives analysis evaluates project need based on quantifiable performance measures including travel time and safety. The 1996 FEIS did not include such quantifiable measures.

Refer to the Final Environmental Impact Statement and Section 4(f) Evaluation (1996 FEIS) to review the original Alternatives analysis, or for electronic versions of this document click on the following link: [1996 FEIS, Purpose and Need](#).

#### 3.1 Introduction

The following five Alternatives were considered in the Alternatives analysis for this Supplemental Final Environmental Impact Statement (SFEIS).

- 1) **No-Action Alternative** - maintaining existing roadways, implementing roadway, mass transit and Transportation System Management improvements (TSM) recommended in the 2020 Regional Transportation Plan (RTP) minus the proposed Transportation System Improvement, plus additional roadway projects within the Project Corridor not listed in the 2020 RTP but anticipated to be implemented by 2020 based on state and local roadway priorities, funding levels and need.
- 2) **Mass Transit Alternative** - maintaining existing service, implementing mass transit improvements recommended in the 2020 RTP, plus additional transit facilities and services not included in the 2020 RTP but identified by local officials as likely to be implemented by 2020.
- 3) **Tollroad/Freeway Alternative** – constructing a full access controlled divided highway on new alignment, constructing baseline roadway improvements and implementing mass transit and TSM improvements recommended in the 2020 RTP.
- 4) **Lemont Bypass Alternative** – constructing a full access controlled divided highway on new alignment in the northern one-quarter of the corridor and a limited access controlled principal arterial on existing alignment in the corridor's southern three-

quarters, plus constructing baseline roadway improvements and implementing mass transit and TSM improvements recommended in the 2020 RTP.

- 5) **Enhanced Arterial Alternative** - improving existing arterials, implementing baseline roadway improvements, plus implementing mass transit and TSM improvements recommended in the 2020 RTP.

This Chapter presents a performance review of the five Alternatives. The analysis evaluated the performance of each Alternative in meeting the four principal needs defined in Chapter 1, Purpose and Need. Travel time and safety were the primary performance measures. The analysis quantified the performance of the individual Alternatives toward reducing projected 2020 travel times and in improving safety over the No-Action Alternative. The performance analysis found:

- Travel times from the Project Corridor to regional job centers served by the proposed Transportation System Improvement are projected to increase by an average 43 percent and up to 55 percent by year 2020 under the No-Action scenario. These travel times would be reduced on average 20 percent by the Tollroad/Freeway Alternative, 15 percent by the Lemont Bypass Alternative and 7 percent by the Enhanced Arterial Alternative. The Tollroad/Freeway Alternative achieved the greatest reduction in projected travel times to regional job centers. As a result, the Tollroad/Freeway Alternative would provide the greatest benefit toward improving Project Corridor access to jobs.
- Planning staff of Will County and the Project Corridor municipal governments reviewed the project Alternatives for consistency with the policies, goals and objectives of their jurisdiction's adopted land use and transportation plan. The Alternatives were ranked on a scale from one to five with one being the least and five being most consistent. The Tollroad/Freeway Alternative was ranked at 4.5, the Lemont Bypass Alternative 3.1, the Enhanced Arterial Alternative 2.3 and the No-Action at 1.5. The Tollroad/Freeway Alternative ranked the most consistent with county and municipal land use and transportation plans. In addition, the Will County Board and Project Corridor Mayors were surveyed as to the effectiveness of each Alternative toward achieving the goals and objectives of their respective jurisdictions. The survey response rate was 100 percent and 90 percent ranked the Tollroad/Freeway Alternative as best suited to meeting this need. As a result, the Tollroad/Freeway Alternative would be the Transportation System Improvement most consistent with County and municipal plans.
- Travel times for local travel within the Project Corridor are projected to increase over 150 percent by year 2020 under the No-Action scenario. These travel times would be reduced on average 13 percent by the Tollroad/Freeway Alternative, 10 percent by the Lemont Bypass Alternative and 7 percent by the Enhanced Arterial Alternative. The Tollroad/Freeway Alternative would reduce these travel times by 13 percent, the Lemont Bypass Alternative 10 percent and the Enhanced Arterial Alternative by 7 percent on average. Accidents within the Project Corridor are projected to increase over 43 percent by year 2020 under the No-Action scenario. The Tollroad/Freeway Alternative would reduce accidents at a rate five times greater than the Lemont Bypass and 31 times greater than the Enhanced Ar-

terial Alternative. The Tollroad/Freeway Alternative achieved the greatest reduction in projected local travel times and accidents within the Project Corridor. As a result, the Tollroad/Freeway Alternative would provide the greatest benefit toward improving local mobility and safety.

Overall, the analysis found the Tollroad/Freeway Alternative outperformed the other Alternatives and was most suited to meeting project need. Therefore, the Tollroad/Freeway Alternative was selected as the Preferred Alternative.

### **3.2 Alternatives Defined**

This SFEIS reviews five Alternatives: No-Action, Mass Transit, Tollroad/Freeway, Lemont Bypass and the Enhanced Arterial. Three of the five Alternatives were carried over from the 1996 FEIS and include the Mass Transit, Tollroad/Freeway and No-Action Alternatives. Alternatives considered in the 1996 FEIS but not carried over are the Transportation System Management (TSM) and Expressway Alternatives, and the multiple alignment iterations of the Tollroad/Freeway Alternative.

The TSM Alternative evaluated in the 1996 FEIS recommended actions to improve existing roadway efficiencies including high occupancy vehicle lanes and similar measures. This Alternative was not carried forward because the 1996 FEIS found the TSM Alternative not to satisfy the Purpose and Need. The 1996 FEIS found the benefit of a stand-alone TSM Alternative was limited and subject to service breakdown if No-Action average daily traffic reached levels projected for 2010. Updated traffic projections completed since publication of the 1996 FEIS forecast 2020 No-Action average daily traffic to increase 70 to 500 percent over 2010 forecasts along the Project Corridor's major arterials. This forecasted increase in traffic would further reduce the limited benefits of TSM found in the 1996 FEIS and further supports the finding that TSM as a stand-alone Alternative would not meet the Purpose and Need. Therefore, TSM as a stand-alone Alternative was eliminated from further consideration.

The Expressway Alternative evaluated in the 1996 FEIS recommended a four-lane divided highway with at-grade intersections. The 1996 FEIS found the Expressway Alternative lacked the required capacity to accommodate, at an acceptable level of service, the average daily traffic projected for 2010 by traffic studies used in the 1996 FEIS. Required modifications to accommodate this traffic included controlling access and replacing at-grade intersections with grade separated interchanges. Integrating these modifications into the Expressway Alternative created a facility comparable in design to the Tollroad/Freeway Alternative. Therefore, the 1996 FEIS eliminated the Expressway Alternative because it was not feasible and therefore did not satisfy the Purpose and Need. Updated traffic projections completed since publication of the 1996 FEIS forecast 2020 average daily traffic to double the traffic volume forecast used in the 1996 FEIS. This increase in traffic would cause additional performance reductions in the Expressway Alternative and further support the 1996 FEIS finding that the Expressway Alternative does not meet the Purpose and Need. Therefore, the Expressway Alternative was eliminated from further consideration in this Alternatives Analysis. Finally, the multiple alignment iterations of the Tollroad/Freeway Alternative evaluated in the 1996 FEIS were not carried over into this Alternatives Analysis. These alignment iterations were adjustments